June 1 2004

Reporting of "Invasive Streps"

Dear Colleagues:

MDCH BOL has received several inquiries regarding the reporting of "invasive strep" infections and submission of isolates to the state lab for further testing. The term "invasive strep" could apply to several different organisms, but three are of particular interest to public health:

1. Sterile site isolates of *Streptococcus pneumoniae*, any susceptibility pattern, in children less than 5 years of age.

Streptococcus pneumoniae infection in children is now considered a vaccine-preventable disease. However, there continue to be isolated cases of what appear to be possible vaccine failures. These cases are of great interest to the CDC, and they have requested that isolates from sterile sites in children less than 5 years of age meeting certain criteria be sent to state laboratories for forwarding to the CDC where serotyping will be performed. We ask laboratories to report them to their local health department and to freeze the isolate or otherwise keep it viable. Fresh isolates of Streptococcus pneumoniae can be successfully frozen in 5% defibrinated sheep blood, TSB with glycerol, or skim milk. We suggest saving these for at least 90 days, to allow enough time for investigation to determine the need for submission. BOL will contact you if the organism needs to be submitted for further testing.

- 2. Sterile site isolates of Drug-Resistant Streptococcus pneumoniae* (DRSP) in patients of any age (*Resistant or Intermediate to one or more antimicrobials) MDCH conducted surveillance at 33 sentinel hospital laboratories for Penicillin-resistant Streptococcus pneumoniae (PRSP) and vancomycin-resistant Enterococcus for more than seven years (1995-2002). As both quarterly data and isolates were submitted to MDCH by participating laboratories, this surveillance was extremely time-consuming for the sentinel sites, but clearly indicated the establishment of resistant Streptococcus pneumoniae in Michigan. In 1995, CDC included DRSP on the list of nationally notifiable diseases. Although this is not at present a reportable disease in Michigan, we are expected to report cases of DRSP isolated from sterile sites to the CDC. We realize that most susceptibility testing of Streptococcus pneumoniae is read manually, making it difficult to easily retrieve susceptibility data that includes isolate source. We are not asking for these isolates to be submitted, but antimicrobial susceptibility test data on sterile site isolates of DRSP is very helpful to our surveillance. If this information is conveniently available to you, please contact Marty Boehme at 517-335-9654 (boehmem@michigan.gov) to discuss sharing this important data with the BOL.
 - 3. Sterile site isolates of Group A Beta-hemolytic *Streptococcus*, any susceptibility pattern, in patients of any age.

The CDC included invasive Group A Beta hemolytic streptococci in the list of nationally notifiable diseases in 1995. Although at this time the MDCH laboratory is **not** requesting these isolates, we do ask that cases of Group A streptococci isolation from sterile sites be reported to your local health department. Only in the case of a potential outbreak would we request submission of isolates.

We are working to update the list of reportable diseases in Michigan to more closely match the national list. However, until that can be accomplished, these current recommendations are summarized in the following table for your convenience. If you have any questions, please contact Martha (Marty) Boehme, Outreach Project Coordinator, at 517-335-9654 or boehmem@michigan.gov

Invasive streptococcal isolates that should be reported and/or sent to the health department				
Isolate	Patient Age	Syndrome/Source	Report to Local Health Dept	Send or save Isolate for State lab
Streptococcus pneumoniae, any susceptibility pattern	<5 years	Invasive infection (CSF, blood, joint fluid, pleural fluid, other sterile sites)	Yes	Save for possible submission
Streptococcus pneumoniae intermediate or resistant to one or more antimicrobials	Any	Invasive infection (sterile sites)	No - Call State lab directly Marty Boehme 517-335-9654	No
Group A Streptococcus	Any	Invasive infection (CSF, blood, joint fluid, pleural fluid, other sterile sites)	Yes	Save for possible submission if multiple cases seen

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